

[Manuals.plus](#) /

› [RoyPow](#) /

› RoyPow C15 6V/12V 1A LiFePO4 Battery Charger and Maintainer Instruction Manual

RoyPow C15

RoyPow C15 6V/12V 1A LiFePO4 Battery Charger and Maintainer Instruction Manual

Model: C15 | Brand: RoyPow

1. PRODUCT OVERVIEW

The RoyPow C15 is an intelligent 6V/12V 1A automatic battery charger and maintainer designed for a wide range of battery types. It features advanced charging stages to optimize battery performance and extend lifespan, including a 0V charging function to reactivate deeply discharged batteries. Its compact design and multiple safety protections ensure reliable and safe operation.



Image: RoyPow C15 6V/12V 1A Battery Charger with its included cables connected to a battery.

2. SAFETY INFORMATION

Always read and understand the entire manual before using the charger. Failure to follow instructions may result in electric shock, fire, or serious injury. Keep the charger away from children. Do not expose the charger to rain or snow. Use only recommended accessories. Disconnect the AC power before making or breaking connections to the battery. Ensure the charging area is well-ventilated.

- **Short Circuit Protection:** Prevents damage from incorrect connections.
- **Overload Protection:** Safeguards against excessive current draw.
- **Over-Current Protection:** Protects the charger and battery from high current.
- **Over-Voltage Protection:** Prevents damage from voltage spikes.
- **Over-Temperature Protection:** Automatically reduces power or shuts down if overheating occurs.
- **Reverse Connection Protection:** Alerts and prevents damage from incorrect polarity.



Image: RoyPow C15 Battery Charger highlighting its multi-protection features including short circuit, overload, over-current, over-voltage, over-temperature, and reverse connection protection.

3. PACKAGE CONTENTS

The RoyPow C15 6V/12V 1A Battery Charger package includes:

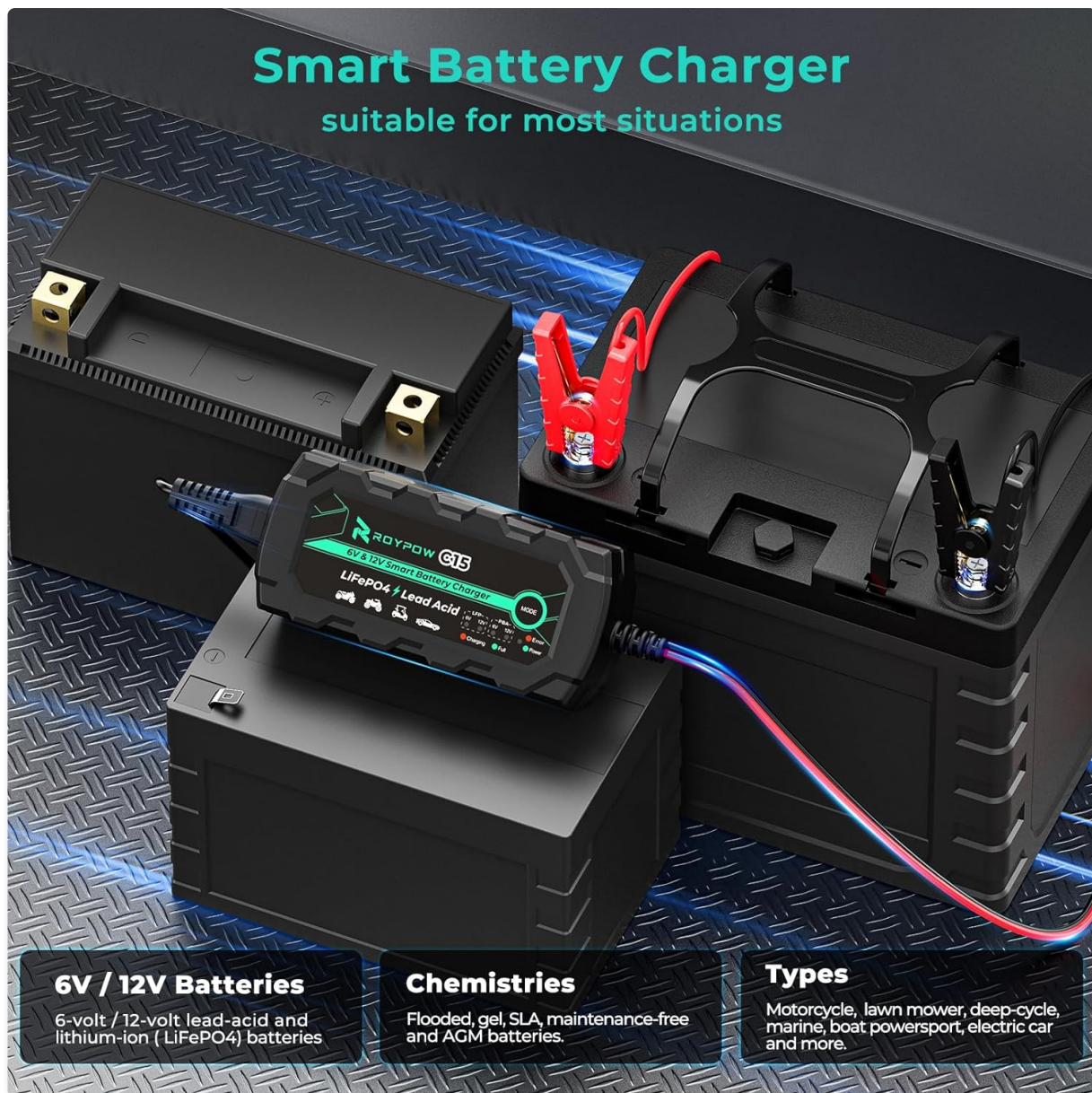
- RoyPow 6V/12V 1A Battery Trickle Charger (Model C15)
- Fused M6 Ring Terminal Accessory Cable (50cm)
- Alligator Clip Accessory Cable (50cm)
- AC Power Cord (100cm)
- Extension Cord (50cm)



Image: The RoyPow C15 Battery Charger laid out with its various components, including the main unit, AC power cord, alligator clip cable, M6 ring terminal cable, and extension cord, with key dimensions indicated.

4. PRODUCT FEATURES

- **Activate Dead Batteries:** Features a 0V charging function to reactivate batteries as low as 1 volt, aiding in the recovery of deeply discharged or long-idle batteries.
- **Wide Compatibility:** Suitable for 6V & 12V lead-acid batteries (wet, gel, flooded, SLA, MF/maintenance-free, AGM, CA, VRLA, EFB) and lithium-ion (LiFePO4) batteries. Ideal for motorcycles, scooters, mopeds, quads, lawn mowers, and lawn tractors.
- **Intelligent Adjustment & Auto Memory:** Dynamically adjusts charge based on ambient temperature using an integrated thermal sensor, preventing overcharging in hot weather and undercharging in cold. Automatically returns to the last selected mode for convenience.
- **Easy to Use and Carry:** Compact dimensions (11.66 × 5.36 × 3.1 cm) and light weight (145g) with a 100-240V input voltage for portability and ease of storage.



6V / 12V Batteries

6-volt / 12-volt lead-acid and lithium-ion (LiFePO4) batteries

Chemistries

Flooded, gel, SLA, maintenance-free and AGM batteries.

Types

Motorcycle, lawn mower, deep-cycle, marine, boat powersport, electric car and more.

Image: RoyPow C15 Smart Battery Charger connected to both a 6V/12V lead-acid battery and a lithium-ion (LiFePO4) battery, demonstrating its wide compatibility for various battery chemistries and types of vehicles.

5. SETUP AND OPERATING INSTRUCTIONS

5.1 Initial Setup

1. Ensure the charger is disconnected from the AC power outlet.
2. Select the appropriate accessory cable (M6 ring terminal or alligator clip) for your battery.
3. Connect the accessory cable to the charger's output port.

5.2 Connecting to Battery

1. Connect the RED (+) positive connector to the positive battery terminal.
2. Connect the BLACK (-) negative connector to the negative battery terminal.
3. Ensure connections are secure and free from corrosion.

5.3 Starting the Charging Process

1. Plug the AC power cord into a suitable electrical outlet (100-240V).
2. The charger will automatically detect the battery voltage (6V or 12V) and type (Lead-Acid or LiFePO4).
3. Press and hold the 'MODE' button for 3 seconds to select the desired charging mode if automatic detection

is incorrect or if you wish to change it. The charger will indicate the selected mode.

4. The charging process will begin automatically. The 'Charging' indicator will illuminate.

5.4 Completing the Charge

1. Once the battery is fully charged, the 'Full' indicator will illuminate.
2. Disconnect the AC power cord from the electrical outlet.
3. Disconnect the BLACK (-) negative connector from the battery.
4. Disconnect the RED (+) positive connector from the battery.



Image: RoyPow C15 Battery Charger connected to a battery using the M6 ring terminal cable, with the alligator clamp cable also shown, illustrating connection options.

6. CHARGING DETAILS AND COMPATIBILITY

The RoyPow C15 charger is designed to provide optimal charging for various battery types. The charging current is consistently 0.8-1.2A across all supported battery types and voltages.

Battery Type	Battery Voltage	Charging Current
Lead-Acid (Pb) (Wet, Gel, MF, AGM, CA, VRLA, EFB)	6V	0.8-1.2A

Battery Type	Battery Voltage	Charging Current
Lead-Acid (Pb) (Wet, Gel, MF, AGM, CA, VRLA, EFB)	12V	0.8-1.2A
Lithium (LiFePO4, LFP)	6V	0.8-1.2A
Lithium (LiFePO4, LFP)	12V	0.8-1.2A

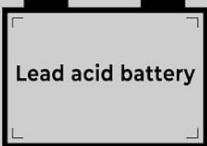
CHARGING DETAILS depending on your battery type		
BATTERY TYPE	BATTERY VOLTAGE	CHARGING CURRENT
Lead acid (Pb) battery (Wet, Gel, MF, AGM CA, VRLA, EFB) 	6V	0.8-1.2A
	12V	0.8-1.2A
Lithium (LiFePO4, LFP) 	6V	0.8-1.2A
	12V	0.8-1.2A

Image: A table detailing the charging specifications for different battery types (Lead-Acid and Lithium) at 6V and 12V, showing a consistent charging current range.

7. MAINTENANCE

The RoyPow C15 is designed for minimal maintenance. Keep the unit clean and dry. Store it in a cool, dry place when not in use. The intelligent adjustment and auto-memory functions help maintain optimal battery performance without constant manual intervention. Periodically check the cables and connectors for any signs of wear or damage.

8. TROUBLESHOOTING

- **Charger not turning on:** Ensure the AC power cord is securely plugged into a live outlet. Check for any tripped circuit breakers.
- **Charging indicator not lighting up:** Verify that the battery connections are correct (positive to positive, negative to negative) and secure. The battery might be severely discharged (below 1V), in which case the 0V activation function should attempt to recover it.
- **Error indicator lights up:** This typically indicates a short circuit, reverse polarity, or an internal fault. Disconnect the charger immediately, check all connections, and ensure the battery is not damaged.
- **Charger gets warm during use:** It is normal for the charger to become warm during operation. However, if it becomes excessively hot, disconnect it and ensure it is in a well-ventilated area.

9. SPECIFICATIONS

Feature	Detail
Model Number	C15
Input Voltage	100-240V AC
Output Voltage	6V / 12V DC
Current Rating	1 Amps
Battery Compatibility	6V & 12V Lead-Acid (Wet, Gel, Flooded, SLA, MF, AGM, CA, VRLA, EFB) & Lithium-ion (LiFePO4)
Product Dimensions	11.66 x 5.36 x 3.1 cm
Weight	145g
Connector Type	Ring Terminal, Alligator Clips
Manufacturer	RoyPow
Country of Origin	China

10. WARRANTY AND SUPPORT

The RoyPow C15 Battery Charger comes with a **2-Year Warranty**. For technical support or warranty claims, please contact RoyPow customer service. Manufacturer contact information: +8618127418334.